

SLIDE RULES

SECTION ONE

OBtainable from
CARBIC LIMITED
54 DUNDONALD ROAD,
LONDON, S.W.19.

BLU

YNCH LANE WEYMOUTH DORSET



WHY AND HOW TO CHOOSE A

B.R.L.

SLIDE RULE

For some years we have concentrated on the manufacture of B.R.L. Slide Rules made from plastic materials. Using specially chosen material of highest dimensional stability, capable of taking the finest engravings of unsurpassed clarity and durability, we are absolutely convinced that no conventional construction of slide rules in wood faced with celluloid can compare with the B.R.L. production. The "satin" finish presents a compromise between a matt surface (thus easily stained) and a high gloss reflecting surface which can result in eyestrain for the continuous user. Completely unaffected by dry or humid conditions, B.R.L. slide rules only need the care one would expect to give to any high grade precision instrument, and today B.R.L. is the hallmark of the finest British production.

On many occasions, we find there is some confusion or doubt in the mind of the potential user as to which type of slide rule is required, hence the following notes, outlining the merits of the various types which are at present available in the comprehensive range of B.R.L. slide rules. All are of the highest degree of accuracy, fine engraving and durability, but differ in the number and choice of scales carried on the rule.

Generally speaking, it is a mistake to select a rule carrying more scales than are likely to be needed, since the less there is on the face, the more easily can the scales be read.

A unique feature of our more expensive models is the special tension device enabling the user to adjust the slide movement to his own requirement.

The following models are fitted with this as a standard feature:

A.G.5. G.29. A.L.6. A.U.7. T.11. T.12. E.13. E.13c. E.25. D.26.

All the 10" slide rules can be fitted with our "Fullview" magnifier which has been widely appreciated.

It is convenient to classify the range of B.R.L. rules into five categories, viz.:

General Purpose	Technicians	Students
Log-Log	Commercial	

When selecting a B.R.L. slide rule it is hoped the following notes will assist the purchaser to choose a rule most suited to his requirements:

General Purpose Range. This consists of 8-10" and 3-6" models. They are based on the Reitz system, which is shown in full in models A.G.5, P.14 and 303 while the less expensive numbers are variants carrying fewer scales in different combinations. Used mainly for multiplication and division, with scales for squaring, cubing, logarithms, and trigonometrical functions.

Log-Log and Technicians Range. This consists of eleven 10" models, two 6" models, and two "Janus Series" Duplex models. The system has some of the features of the General Purpose Range, but often the cubing (k) and Log (L) scales are omitted in favour of Log-Log scales for raising to powers or extracting roots. In their simpler forms, model A.L.4 is the less expensive variant, and models P.17 and A.L.6 include scales for trigonometrical functions.

More advanced patterns (Multi-Log) designed mainly for use by Technicians, embody an extra Log-Log scale to cover a wider range, and others such as the Vector Scale, and Folded Scales. Reciprocal Log-Log Scales are included in the two Duplex models. There are also several rules having scales for Electrical calculations, and the following table may serve as a guide:

Log-Log Standard Models. A.L. 4, A.L.6, P.17.

Multi-Log Models. T.11, T.12, E.13, D.26, T.50, T.51, P.28.

Vector Scale ($P \dots \sqrt{1-x^2}$) Models. T.11, T.12, E.13, D.26, P.28.

Folded Scale (πx) Models. T.12, E.13, T.50, T.51, G.27.

Log-Log Duplex Models . . . Janus Series. T.50, T.51.

Electrician's Models. E.25, E.13, P.16.

Finally, we would draw attention to model T.50 in the Janus Series. It is certainly the aristocrat of present-day Slide Rules. Its Junior edition No. T.51 is of modified construction, and is a most useful rule.

Commercial Model. This slide rule is especially designed to solve problems concerning £ s. d. and can be of great assistance in Counting Houses, Cost Offices, Sales Departments and similar places. Special scales are included to cover "profit on cost" and "profit on return" as well as the usual calculating scales. Direct readings in £ s. d. are obtainable.

Students Range. This consists of 5 special models known as "Academy Series." They cover the main systems in use today and offer superlative quality rules of British make at very economical prices.

B.R.L

RANGE OF SLIDE RULES

MADE OF IVORY COPOLYMER

Type	Ref. No.	Size	Packing	Cursor	Scales	Instructions	Magnifying Accessories (see pages 10-12)
REITZ AND GENERAL PURPOSE MODELS	A.G.1	10"	Strong covered box	L.23 3-line	A...x ² K...x ³	B...x ² C...x L(M)...Log x C1(R)...1 x	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17
	Academy 300	10"	Strong covered box	L.24 Single line	Ditto	Ditto	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17
	A.G.2	10"	Strong covered box	L.23 3-line	Ditto	Ditto	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17
	P.19D	6"	Leather Case	L.25 3-line	A...x ² C1(R)...1 x	B...x ² C...x D...x	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17
	G.22	10"	Strong covered box	L.23 Single line	Ditto	Ditto	(a) Magnex ... L.22 Size 10 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17
NOTE G.22 does not carry C1(R)...1 Scale x							



Note—Packing and carriage extra

Type	Ref. No.	Size	Packing	Cursor	Scales	Instructions	Magnifying Accessories (see Pages 10-12)			
REITZ AND GENERAL PURPOSE MODELS	G.23	10"	Strong covered box	L.23 3-line	$A_{...}x^2$ $K_{...}x^3$ $B_{...}x^2$ $L(M)...Log x$	$C_{...}x$ $C1(R)...x$ $D_{...}x$ x	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17			
	G.27	10"	Strong covered box	L.23 3-line	$A_{...}x^2$ $CF...x^2$	$C_{...}x$ $D_{...}x$	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17			
	P.150D	6"	Leather Case	L.25 3-line	$A_{...}x^2$ $L...Log x$	$B_{...}x^2$ $C1(R)...x$ $S...sin\theta$	$C_{...}x$ $D_{...}x$ $Ditto$	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17		
	*G.29	10"	Strong covered box	L.23 3-line		$T...tan\theta$ $Ditto$	$ST...sin\theta tan\theta$ $Ditto$	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17		
	P.14D	6"	Leather Case	L.25 3-line	$A_{...}x^2$ $K_{...}x^3$	$B_{...}x^2$ $L(M)...Log x$	$C_{...}x$ $C1(R)...x$ $S...sin\theta$	$D_{...}x$ $ST...sin\theta tan\theta$ $Ditto$	$Book B1 ... English (Blue)$ $B3 ... French$ $B4 ... Dutch$	(a) Magnex ... L.22 Size 10
	*A.G.5	10"	See price list for alternatives	L.23 3-line	Ditto	Ditto	Ditto	Ditto	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17	
	Academy 303	10"	Strong covered box	L.24 3-line	Ditto	Ditto	Ditto	Leaflet B19	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17	

6m

* Fitted with patent adjustable slide tensioning.
Note.—Packing and carriage extra.

Type	Ref. No.	Size	Packing	Cursor	Scales	Instructions	Magnifying Accessories (see pages 10-12)
LOG—LOG							
A.L.4	10"	Strong covered box	L.23 3-line	A...x ² L.L2...e ^{0.1x}	B...x ² L.L3...e ^x	C...x C1(R)...1 x	Book B1 ... English (Blue) B3 ... French B4 ... Dutch
P.17D	6"	Leather Case	L.25 3-line	A...x ² LL2(U1)...e ^{0.1x}	B...x ²	C...x LL3(LL)...e ^x	Book B1 ... English (Blue) B3 ... French B4 ... Dutch
				C1(R)...1 x	K...x ³	D...x L...Log x	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17
				S...sin α	T...tan θ	ST...sin θ /tan θ	(a) Magnex ... L.22 Size 10 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17
*A.L.6	10"	See price list for alternatives	L.23 3-line	Ditto	Ditto	Ditto	(a) Magnex ... L.22 Size 8 (b) Fullview ... L.18 with L.23 fitted cursor or return cursor to be fitted with Lug L.17
Academy 302	10"	Strong covered box	L.24 3-line	Ditto	Ditto	Leaflet B19	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17

NOTE
P.17D does not carry K...x³ or L...log x
Academy 302 does not carry ST Scale
A.L.6 does not carry K...x³ or L...log x

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Note.—Packing and carriage extra

Type	Ref. No.	Size	Packing	Cursor	Scales	Instructions	Magnifying Accessories (see pages 10-12)			
LOG-LOG Contd.	P.28	6"	Leather case	L.15 Size 3 4-line	$A_{...}x^2$ $L(M)...Log\ x$	$B_{...}x^2$ $K_{...}x^3$	$C_{...}x$ $C1(R)...1$ x	D...x $LL3...e^{\theta x}$ $T...tan\theta$	Book B1 ... English (Blue) B2 ... French B3 ... Dutch B4 ... Dutch	(a) Magnex ... L.22 Size 3
				LL1...e^{\theta x}	LL2...e^{0.1x}	$P...V/1\cdot x^2$		Ditto	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17	
	*D.26	10"	See price list for alternatives	L.24 4-line	Ditto	Ditto	Ditto	Ditto	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17	
	Academy 304	10"	Strong covered box	L.24 4-line	Ditto	Ditto	Leaflet B19	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17		
	*T.11D	10"	See price list for alternatives	L.24 3-line	$A_{...}x^2$ $C1(R)...1$ x	$B_{...}x^2$ $LL2(UL)...e^{0.1x}$	$C_{...}x$ $P...V/1\cdot x^2$ $LL1(LL)...e^{\theta 0.1x}$	$D_{...}x$ $LL3(LL)...e^{\theta x}$	Book B1 ... English (Blue) B2 ... French B3 ... Dutch B4 ... Dutch	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17
	*T.12D	10"	See price list for alternatives	L.24 3-line	$A_{...}x^2$ $P...V/1\cdot x^2$	$C_{...}x$ $C1(CRF)$ π x	$D_{...}x$ $LL(MAN)...Log\ x$	$K_{...}x^3$ $DF...e^{\theta x}$ $C1(CR)...1$ x	Book B1 ... English (Blue) B2 ... French B3 ... Dutch B4 ... Dutch	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17
	*A.U.7	10"	See price list for alternatives	L.14 Size 2 3-line	$A_{...}x^2$ $C1(REC)...1$ x	$B_{...}x^2$ $LL2(UL)...e^{0.1x}$	$K_{...}x^3$ $L(MAN)...log\ x$	$D_{...}x$ $LL3(LL)...e^{\theta x}$	Book B1 ... English (Blue) B2 ... French B3 ... Dutch B4 ... Dutch	(a) Magnex ... L.22 Size 2 (b) Fullview ... L.18 with L.14 fitted cursor or return cursor to be fitted with Lug L.17

* Fitted with patent adjustable slide tensioning.

Note.—Packing and carriage extra

Type	Ref. No.	Size	Packing	Cursor	Scales	Instructions	Magnifying Accessories (see pages 10-12)
ELECTRICIANS	P.16D	6"	Leather Case	L.25 3-line	K/W/A...x ² D...x S...sin θ T...tan θ Voltage drop, Dynamo and motor efficiency scales, Resistance for varying temperature scale, Cosine scale for A.C. Power calculations.	HP/B...x ² LL2(U/L)...e ^{0.1x} ST...sin θ C...x LL3(LL)...e ^x B4 Dutch	(a) Magnex ... L.22 Size 10 (b) Fullview ... L.18
Academy 305	10"	Strong covered box	L.24 4-line	K...x ³ LL2...e ^{0.1x} S...sin θ T...tan θ Voltage drop, Generator efficiency, Motor efficiency, 3-Phase Generator efficiency, 3-Phase Motor efficiency.	HP/B...x ² C1...1 x LL3...e ^x T...tan θ C...x LL3(LL)...e ^x B4 Dutch	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17	
*E.25	10"	See price list for alternatives	L.14 Size 1 4-line	A...x ² L...Log x C1...1 x T...tan θ Voltage drop, Dynamo and motor efficiency, Dynamo and motor efficiency 3-Phase.	B...x ² LL2...e ^{0.1x} K...x ³ C...x D...x LL3(LL)...e ^x B4 Dutch	(a) Magnex ... L.22 Size 1 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.17	
*E.13	10"	See price list for alternatives	L.24 Size 1 3-line	LL1(L1)...e ^{0.1x} A...x ² C1(CR)...1 x P... $\sqrt{1+x^2}$ S...sin θ T...tan θ L(MAN)...Log x ST...sin θ	LL2(U/L)...e ^{0.1x} K...x ³ C...x D...x C1(CR)...1 x P... $\sqrt{1+x^2}$ S...sin θ T...tan θ L(MAN)...Log x ST...sin θ	(a) Magnex ... L.22 Size 9 (b) Fullview ... L.18 with L.24 fitted cursor or return cursor to be fitted with Lug L.11	

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Note: — Packing and carriage extra

Type	Ref. No.	Size	Packing	Cursor	Scales	Instructions	Magnifying Accessories (see pages 10-12)
MERCANTILE	C.24	10"	Strong covered box	L.24 Single line	Monetary Scales. L.....£80 S.....10/- to £8 Calculating Scales A and B Discount (IR) and uplift (IL) Scales, which also show percentage decrease and increase, and profit on cost and return.	Leaflet B7	(a) Magnex ... L.22 Size 9 (b) Fullview ... cursor or return cursor to be fitted with Lug L.17
JANUS SERIES (Log-Log Duplex)	T.50	10"	Case W.2 Size 5	L.20 Single line Reading both faces	OVERSE C...x CF...nx LL1...e ^{-nx} L...Log x	Book B5 REVERSE B...x ² D...x DF...nx LL2...e ^{-nx} T...tanθ	(a) Magnex ... L.22 Size 4 (b) Fullview ... cursor or return cursor to be fitted with Lug L.17
							C1...x ¹ CIF...π LL.OO...e ⁻¹⁰ ST...sinθtanθ

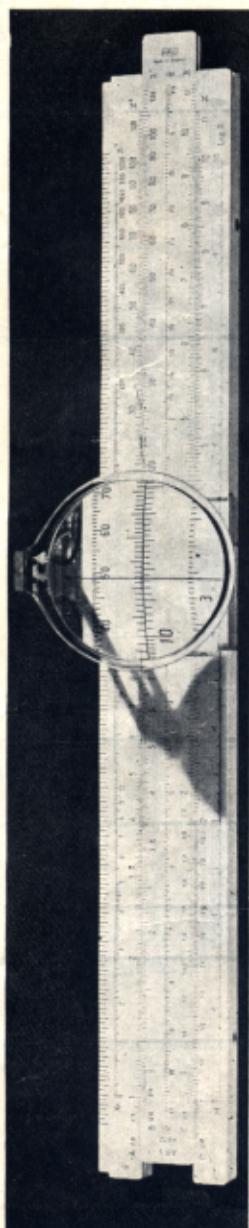
JANUS SERIES (Log-Log Duplex) Contd.)	T.51 10" Strong covered box Reading both faces	L.21 Single line Reading both faces	Ditto Ditto Ditto	Ditto Ditto Ditto	Ditto Ditto Ditto
(Navigators)	N.52 10" See price list for alternatives	L.20 Single line Reading both faces	OVERSE A...x ² K...x ³ S...sinθ TB...tanθ	B...x ² C...x L...log x TA...tanθ	D...x Book B6 or (a) Magnex ... L.22 Size 7 (b) Fullview ... L.18 with L.21 fitted cursor or return cursor to be fitted with Lug L.17
(Traction Engineers)	TR.53 10" See price list for alternatives	L.20 Size 3 Single line Reading both faces	OVERSE A...x ² C1(R)... ¹ _x	B...x ² LL2... ^{2.1} _x LL3... ² _x	D...x Leaflet B9 or (a) Magnex ... L.22 Size 6 (b) Fullview ... L.18 with L.20 Size 3 fitted cursor or return cursor to be fitted with Lug L.17
			REVERSE C...x	D...x C1... ¹ _x	REVERSE d V1 Speed increment—km/h d V2 Speed increment—m.p.h T...Time—Seconds. V...Mean speed—km/h or m.p.h S1...Distance—km or miles S2...Distance—yards

* Fitted with patent adjustable slide tensioning
Note.—Packing and carriage extra

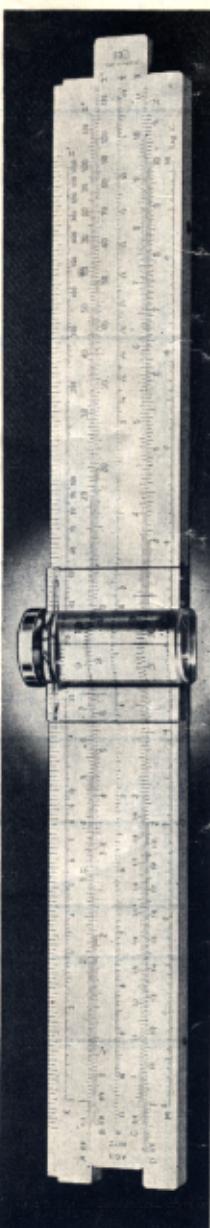


ACCESSORIES FOR SLIDE RULES

FULLVIEW
Ref. L.18



MAGNEX
Ref. L.22



MAGNIFYING ATTACHMENTS

Ref. No.	Description
L.18	The B.R.L. FULLVIEW MAGNIFIER A very handy attachment giving a large and clear field of vision. It consists of a rimmed lens with a hinge, fitted to a Perspex pedestal. This fits instantly into a small lug on the cursor and, when not in use, can be kept in a pocket in the lid of a specially deep slide rule case. If a slide rule, which is normally packed in an instrument case, and a magnifier are ordered together, the correct size case will be supplied, but new cases can be obtained separately if needed, see below. The Fullview is not available for 6" slide rules. Complete, including all parts Lens and pedestal only. Lug only, including cost of fitting to cursor. Stocks of cursors are kept fitted with this lug. In this case, the combined price of cursor and lug applies.
L.17	Deep lidded case to house both slide rule and magnifier. For standard 10" rules. For wide-face 10" rules.
W.1	

ESPECIALLY USEFUL WITH DUPLEX RULES INSTANTLY REVERSIBLE

Ref. No.	Description
L.22	The NEW MAGNEX A half round lens to clip on cursor (Provisional patent). This is a new design fitted with a spring clip at one end to ensure a good fit. When not wanted it can instantly be removed. Sizes 3, 8 and 10. Sizes 1, 2, 4, 5, 6 and 7. Leather pouches for either size Purchase tax on pouch.
W.9	

When ordering Magnex, please state the slide rule model with which it is to be used



CURSORS

DESIGNATION		DESCRIPTION	
(a) Single Line cursor		Central hair line, filled black.	
(b) 3-Line cursor		Two side hair lines filled red, placed one on each side of central Black hair line, to convert the diameter of a circle into area and vice versa.	
(c) 4-Line cursor		Lines as described in (b) above plus extra line (H.P. Gauge line) multiplying and dividing by 746.	
Cursor Ref.	No. and Size	Fitting Models	Fitting L.22 Magnex
L.14	Size 1	E.25	Size 1
L.14	Size 2	A.U.7	Size 2
L.15	Size 3	P.28	Size 3
L.20	Size 1	T.50	Size 4
L.20	Size 2	N.52	Size 5
L.20	Size 3	TR.53	Size 6
L.21	—	T.51	Size 7
L.23	—	Standard 10"	Size 8
L.24	—	10" Wide and Academy Series	Size 9
L.25	—	Standard 6"	Size 10

INSTRUCTION BOOKS

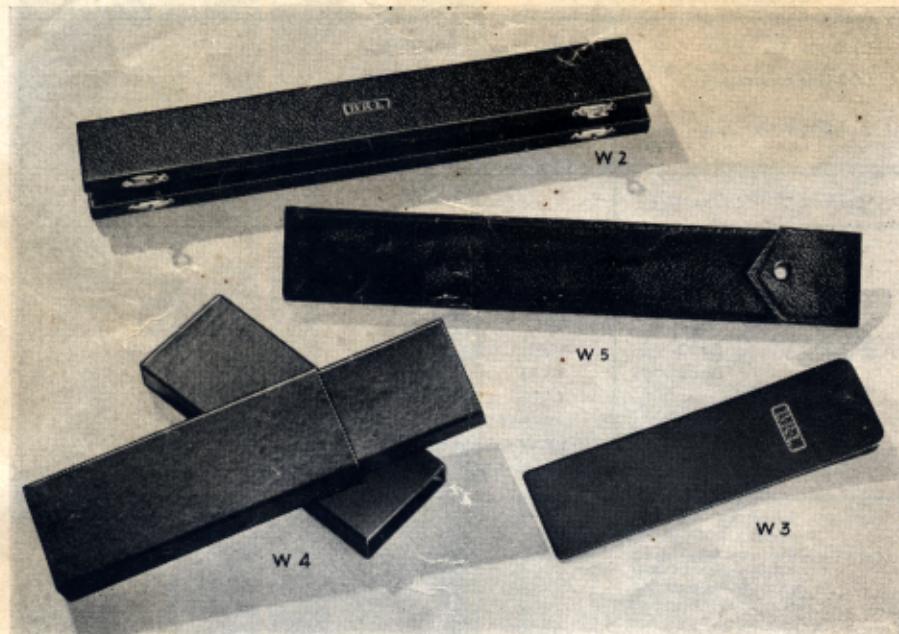
- B.1 ... Standard Instruction book. English Edition (Blue Cover).
- B.2 ... Combined Electrical Instruction book. English Edition (Red Cover).
- B.3 ... Standard and Electrical Instruction book. French Edition (Blue Cover).
- B.4 ... Standard and Electrical Instruction book. Dutch Edition (Blue Cover).
- B.5 ... Dual Face Slide Rule Instruction book by F. Roberts, Esq., O.B.E., D.S.C., M.I.Mar.E.
- B.6 ... Special Navigation Slide Rule Instruction book by J. C. Padmore, Esq.
- B.7-B.18 (inclusive) Instruction leaflets for special models as applicable.
- B.19 ... Standard Instruction leaflet for Academy Series (Blue text).
- B.20 ... Combined Electrical Instruction leaflet for Academy Series (Red text).

DATA TO BE TAKEN

On delivery this set of equipment will be assembled, when the instruction leaflets and slide rule will be complete, the following data will be required:



CONTAINERS



Ref. No.	Description
W.1	Instrument type Hinged Case
W.2	Instrument type hinged case
W.3	Leather Case in Brown Hide for Pocket Slide Rules
W.4	Strong covered cardboard box
W.5	Imitation Leather Case with pressbutton flap
W.24	Strong box covered in book cloth
	To house Rule and Full View Magnifier For standard 10" rules For wide-face 10" rules
	Purchase Tax For standard 10" rules For wide-face 10" rules
	For standard 10" rules For standard 10" rules

CONDITIONS OF SALE

"All goods comprised in this catalogue are sold subject to observance of the fixed retail prices specified, and the Conditions of Sale, notified separately".